

Introducing the I-DEAS Interface

I-DEAS® Tutorials: Fundamental Skills

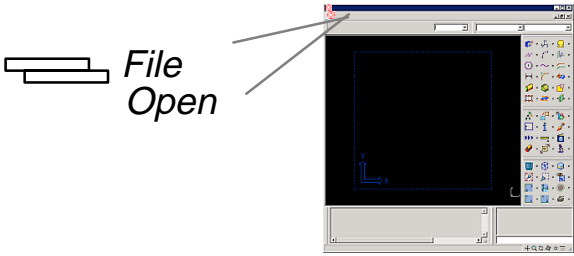
Learn about:

- windows
- mouse buttons
- applications and tasks
- menus
- icons
- using the online tutorials

Things to notice

Standard Windows conventions have been incorporated into the I-DEAS interface, making the look and feel of I-DEAS consistent with the Windows environment. Much of the interface is customizable, and different layouts can be saved. This allows you to set up the I-DEAS interface so that it is laid out best for you.

If you didn't start I-DEAS with a new (empty) model file, open a new one now by clicking on *File*, then *Open*.



I-DEAS Question

Save changes before switching model files?

☐ Yes

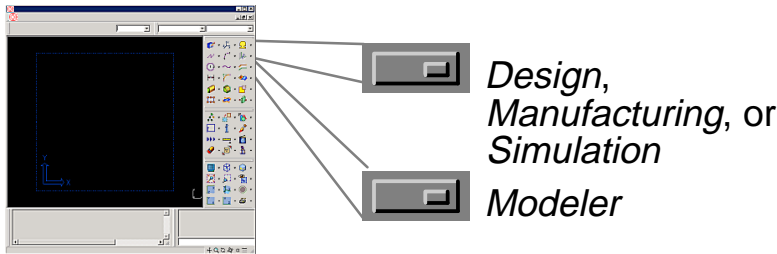
Open Model File form

Model File name: any unique name

Things to notice

- ☐ This symbol is used in the tutorials whenever you should select from the top menu (*File*, *Options*, or *Help*).
- ☐ This symbol is used whenever you should click a button on an I-DEAS form.
- This symbol is used whenever you should fill in a field on an I-DEAS form.

Make sure you're in the following application and task:

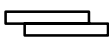


Things to notice



This symbol is used in the tutorials whenever you should select an item from a pull-down menu.

Save your model file.



File
Save

Warning!

If, during this tutorial, you are prompted by I-DEAS to save your model file, respond:



No

Save only when the tutorial instructions tell you to—not when I-DEAS prompts for a save.

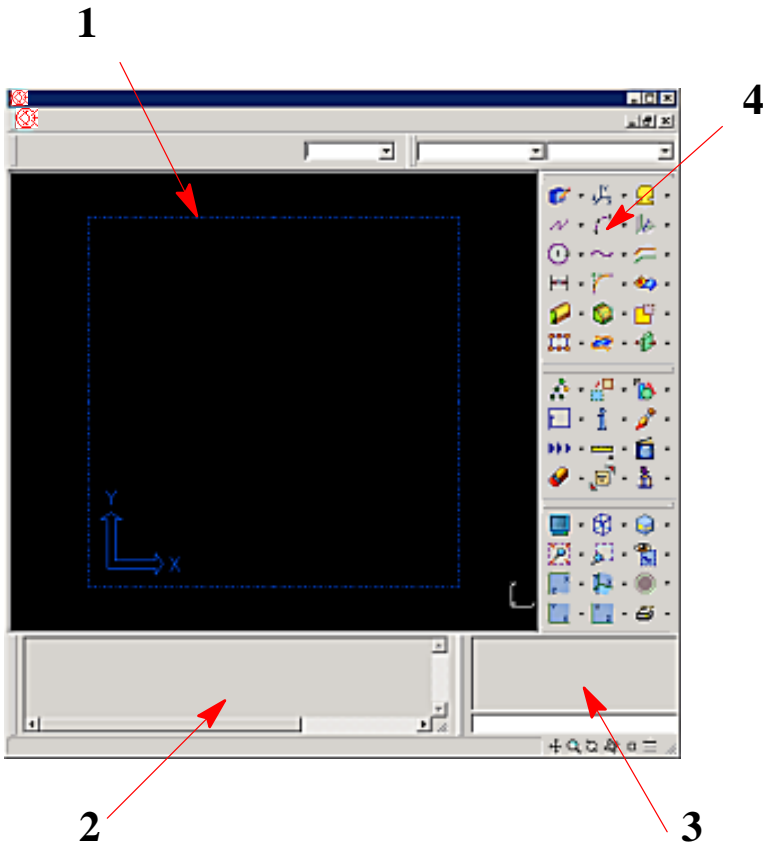
If you make a mistake at any time between saves and can't recover, you can reopen your model file to the last save and start over from that point.

Hint

To reopen your model file to the previous save, press Control-z.

I-DEAS creates for areas on your screen:

- 1. *Graphics area*
- 2. *I-DEAS List area*
- 3. *I-DEAS Prompt area*
- 4. *I-DEAS Icons*



1. **Graphics area**

The *Graphics* area displays the workplane and your parts or assemblies.

2. **I-DEAS List area**

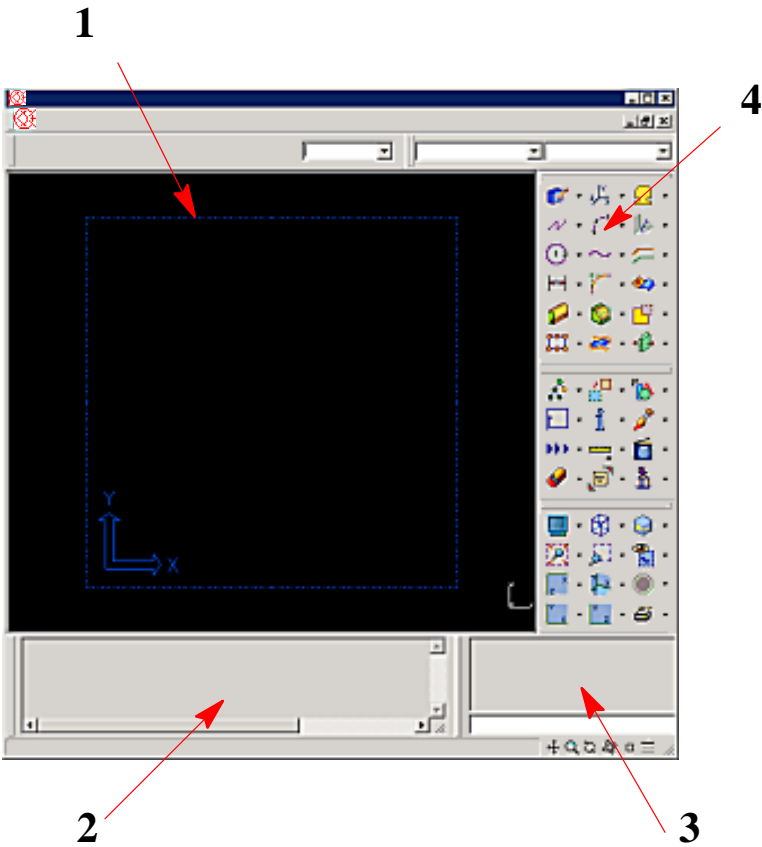
The *I-DEAS List* area displays output information generated by commands.

3. **I-DEAS Prompt area**

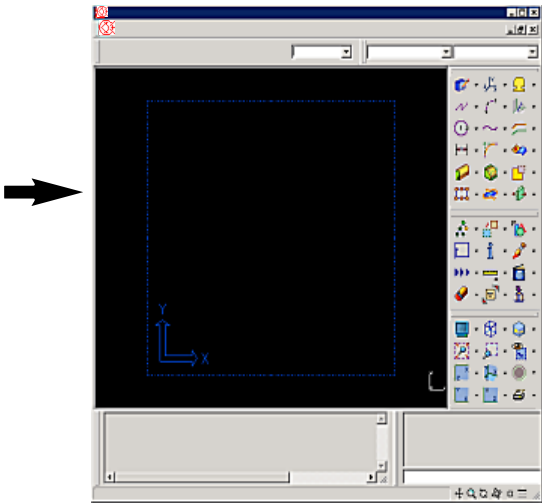
The *I-DEAS Prompt* area prompts you for information needed to complete a process, such as dimension values.

4. **I-DEAS Icons**

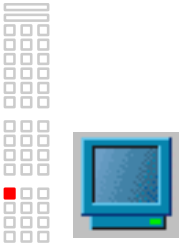
The *I-DEAS Icons* contain the pull-down menus to change the application or task; it also shows the task, application, and I-DEAS-wide icons that control the software.



If you need to resize the I-DEAS window to make room for the online tutorial, click and hold the left mouse button on the left-hand side of the window, and then drag the left edge of the window to the right. (This will leave more room for the tutorial.)



Next, click on the *Redisplay* icon to refresh the *Graphics* area.



The three mouse buttons have a consistent use in each of the I-DEAS applications. The mouse buttons are used as follows:



left mouse button

The left mouse button is used for most operations, such as selecting menus and icons, while some operations use a “click and drag” or a “double-click” of the left mouse button.



middle mouse button

The middle mouse button is the same as the Enter or Return key, often used to accept the default answer to prompts, or to end the selection of entities and perform a command.






right mouse button

The right mouse button pops up a menu of other choices such as to modify the mode of picking graphics. When you use the right mouse button, you hold down the right button and slide the mouse pointer up or down to select the desired command. With the command selected, release the button. If you change your mind and don't want to make a choice, slide the mouse pointer to the side, off the pop-up menu.



The table on the next page summarizes the different mouse button operations.

Mouse Button Operations

Button	Operation	Uses
	click (quickly)	Select icons, menus, and form entries. Pick graphic items.
	shift-click	Pick multiple graphic items, or deselect items. Select a range of items in a form
	control-click	Select multiple items in a form. Select an icon to remain on top of the stack.
	hold, drag	Pop up more icon choices. Pick items within a boxed area on the screen.
	double-click	Used in forms to “open” a listed item name that is followed by ...
	multiple clicks	“Walk” the part hierarchy, e.g., first click picks edge or face, second click picks the whole part, third click picks the feature. The selection is indicated by being highlighted: a yellow bounding box on features; a white bounding box around the part.
	click	Same as Return key. Use to pick default answer, or to end an operation.
	hold, drag	Select other pop-up “Menu” choices.

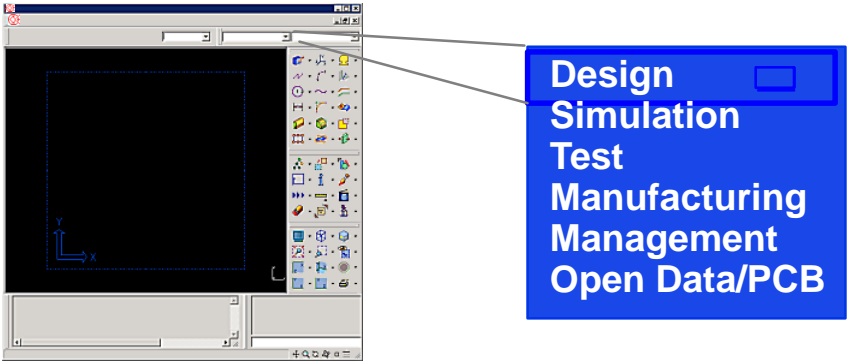
I-DEAS is divided into “applications,” which are further divided into “tasks,” a few of which are shown below.

Applications	Tasks
<i>Design</i>	<i>Modeling</i>
	<i>Assembly</i>
	<i>Drafting</i>
	<i>Mechanism Design</i>
	<i>Harness Design</i>
<i>Simulation</i>	<i>Modeling</i>
	<i>Boundary Conditions</i>
	<i>Meshing</i>
	<i>Model Solution</i>
	<i>Post Processing</i>
	<i>Optimization</i>
<i>Manufacturing</i>	<i>Modeling</i>
	<i>Generative Machining</i>
	<i>Assemble Setup</i>
<i>Test</i>	<i>Time History</i>
	<i>Histogram</i>
	<i>Model Preparation</i>
	<i>Signal Processing</i>
	<i>Modal</i>
	<i>Fatigue Life</i>
	<i>Post Processing</i>

When you signed on to I-DEAS, you selected an application and a task on the Start form.

You can also change applications and tasks from the toolbar above the graphics area.

For example, click on the application menu and see the applications that are available.



Make sure you're still in the application you started in.



Design
-or-

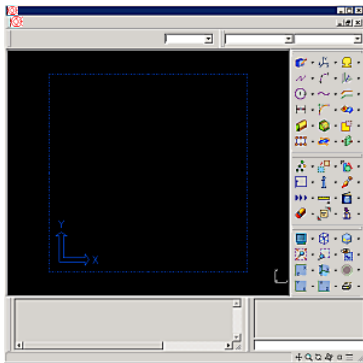


Simulation
-or-



Manufacturing

Now click on the task menu and see the tasks that are available.



Modeler
Assembly
Drafting
Mechanism Design
Harness Design
Product Modeling


Make sure you're still in the *Modeling* task.



Modeler

Things to notice

These two menus let you know exactly where you are. That is, if you look at the menus now, you know what application you are in and that you are in the *Modeling* task.

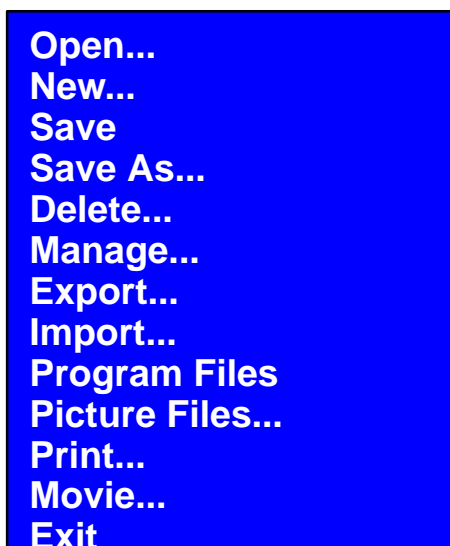
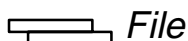
 When you switch to another application and task, the icons on the icon panel change. You will learn more about these later in this tutorial.

In addition to the application and task menus, I-DEAS has an additional toolbar at the top.

File Edit View Options Tools Windows Help

File menu

Click on the *File* menu.




Things to notice

Some of these options may not be available on your platform. If an option is not available, it will be either grayed-out or not on the list.

Recovery Point



 If you did not enter a model file name on the Start form, the software will ask you to enter a name now.

Model File name: enter any name

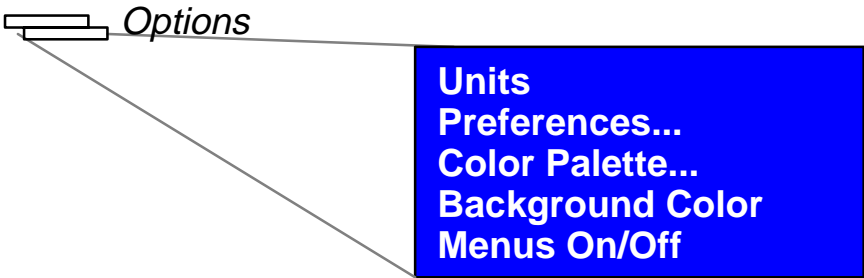


Check *I-DEAS List*.

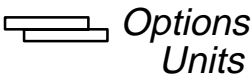
Look at the *I-DEAS List* window. A message will tell you that your model file has been saved.

Options menu

Now click on the *Options* menu.



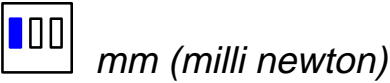
Click on *Units*.



Things to notice

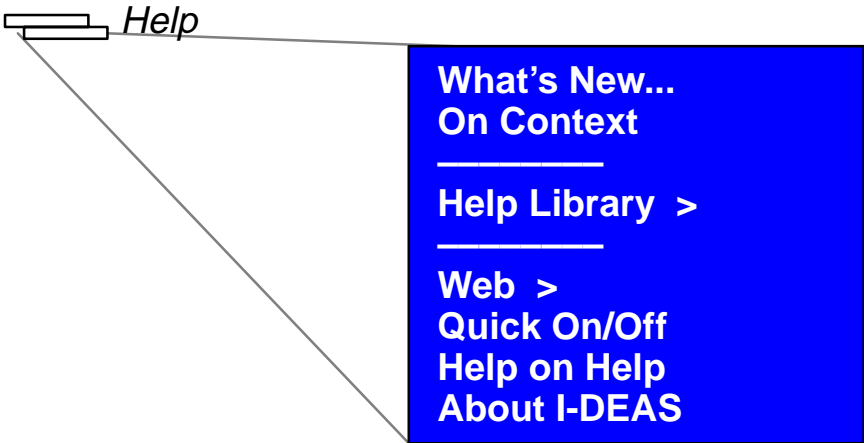
A menu of the different options for units is displayed.

For this tutorial, set the units to millimeters.



Help menu

Click on the *Help* menu.



Things to notice

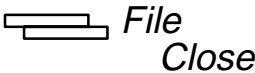
You can use the *Help* menu when you need help or want to get information about an icon, process, task, etc.

Click on *Help on Help*



Your file browser displays an article about how to use the Help Library.

Close your file browser:



Recovery Point



The *I-DEAS Icons* are divided into three toolbars that can be resized, docked and closed. Docking consists of moving a toolbar and attaching it to an edge of the application window. You move a toolbar by clicking on the double bar on the toolbar edge and dragging it to another spot.

In addition to docking, you can resize the toolbars to get the shape you want for ease of use, to conveniently move them out of the way, or to maximize the size of the graphics area.



- top section = task toolbar
- middle section = application toolbar
- bottom section = display and view toolbar

Below are some examples of how you can resize your toolbar:



Windows-Look I-DEAS
Application toolbar

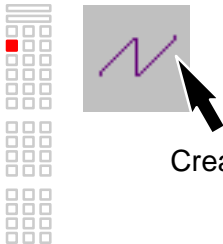


The toolbar resized

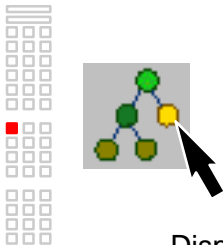
The toolbar resized to the height of one icon



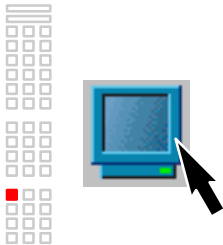
Move the mouse over the icon panel and notice the Quick Help text at the bottom-left of the *Graphics* window. Tool tips also appear on each icon.



Creates a series of lines that are connected end to end

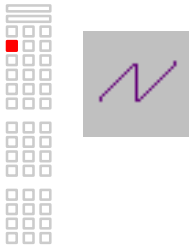


Displays history tree access form for a selected part



Redraws graphics window

You select icons by clicking them with the left mouse button. Click quickly on the *Polylines* icon with the left mouse button.



Things to notice


Notice that the *Polylines* icon is highlighted, which indicates that it has been selected and is active.

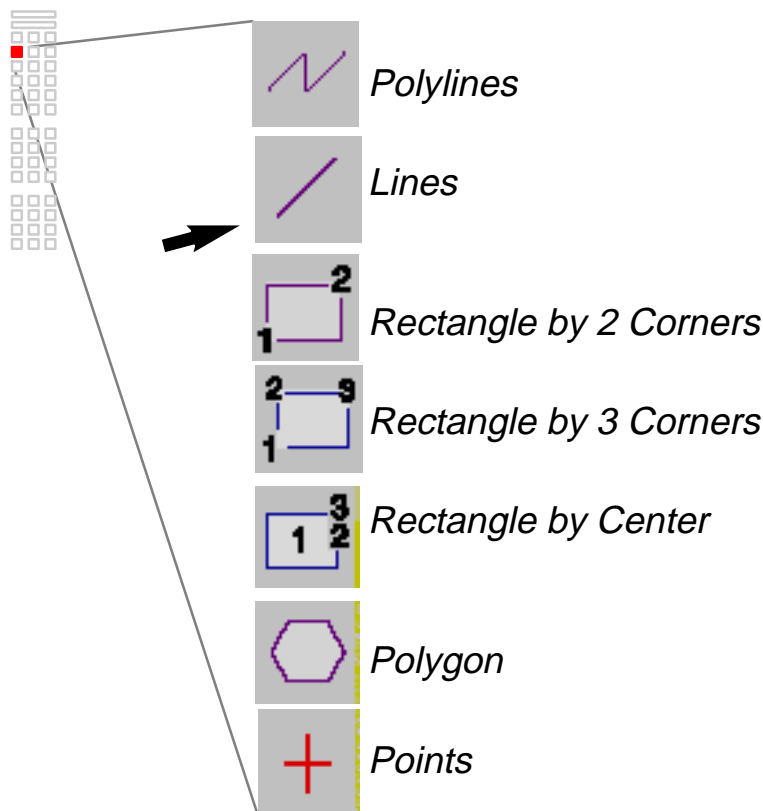
Since the *Polylines* icon is active, I-DEAS is expecting you to sketch something. You'll start sketching a little later in the tutorial. To deactivate the icon, press the middle mouse button while the cursor is in the *Graphics* window.



(to deactivate the command)

Most of the icons are organized into stacks of related icons. Click and hold on the *Polylines* icon. Notice how a stack of related icons is displayed.

 To select one of the icons in the stack, move the mouse pointer up and down the stack until the border of the one you want highlights (looks beveled), then release the mouse button.



Practice by selecting the *Lines* icon from the stack. When you do, the *Lines* icon comes to the top of the stack, and is highlighted.

Things to notice

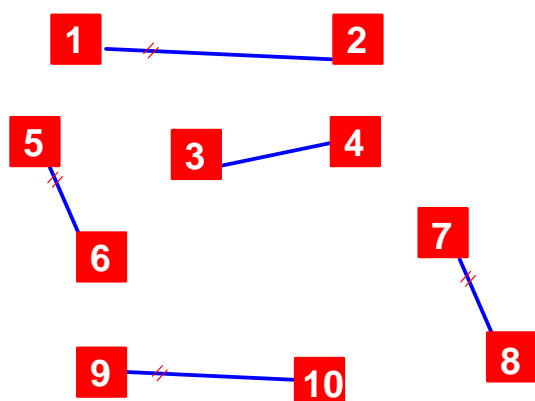
Notice that a prompt is given asking you to “Locate start.” Also, an odometer is shown in the upper corner of the *Graphics* window to show your XY locations. Move the mouse and watch the odometer change.

Draw a few lines, clicking once with the left mouse button for the start of the line, and once with the left mouse button for the end of the line. Don't worry if some of your lines have dimensions shown.



Check *I-DEAS* Prompt.

Get in the habit of watching the *I-DEAS* Prompt area for questions and instructions.



Terminate the *Lines* icon by pressing the middle mouse button.



(to deactivate icon)

Things to notice

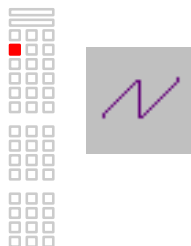
1 This symbol is used throughout the tutorials whenever you should use the left mouse button to click on the corresponding position shown on the sketch or part.

Next, reopen your model file to the last save, so you'll have an empty workbench to sketch the next shape.


Hint

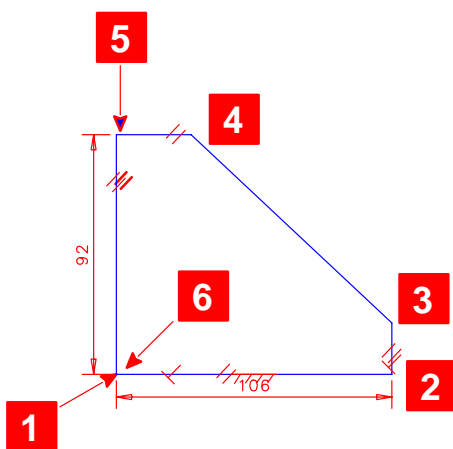
Control-z

Click on the *Polylines* icon with the left mouse button.



Sketch the boundary as shown below, using the left mouse button to pick points 1 through 6. Don't worry about the dimensions.

 After picking point 6, terminate the command by pressing the middle mouse button.



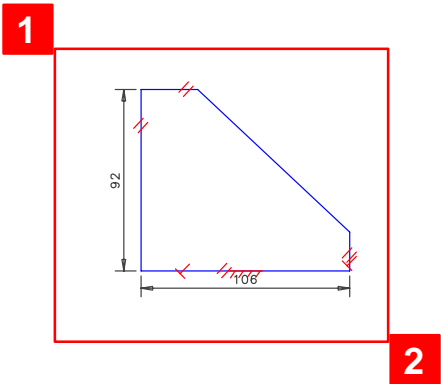
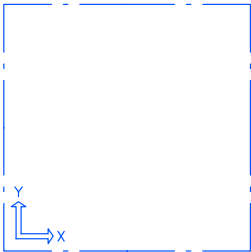
Things to notice

Notice that the *Polylines* icon is no longer highlighted. You ended the command when you pressed the middle mouse button.

To have nothing in the *Graphics* area for the next section, delete your sketch.



- 1 click and hold the left mouse button down while you drag a box to surround the sketch
- 2 release the left mouse button

 (to indicate Done) Yes (to deactivate icon)

Using the online tutorials

The online tutorial you take next depends on your area of interest. The tutorials are designed and organized to take you through a learning path to teach you the skills necessary to perform certain activities. The available paths are:

- *Design – Part Modeling*
- *Design – Surfacing*
- *Design – Assemblies*
- *Drafting*
- *Simulation*
- *Manufacturing*
- *Test*

Some of these paths have two levels of tutorials:



1 – Fundamentals



2 – Advanced Projects

Some tutorials are required before continuing to the next step, while others are optional, but highly recommended. As you progress through a path, each tutorial will tell you what is required, what is recommended, and where you should go next.

Tutorial wrap-up

You have completed the Introducing the I-DEAS Interface tutorial.